Commonwealth of Kentucky
Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Hossein Rakhshan

GENERAL INFORMATION:

Name:	Gallatin Steel Company
Address:	US Highway 42 West, Ghent, Kentucky
Date application received:	4/29/2008
SIC/Source description:	3312
Source ID #:	21-077-00018
Source A.I. #:	1449
Activity #:	APE20080001
Permit number:	V-08-027

APPLICATION TYPE/PERMIT ACTIVITY:

[ ] Initial issuance	[ ] General permit
[ ] Permit modification	[ ]Conditional major
__Administrative	[X] Title V
__Minor	[ ] Synthetic minor
_Significant	[X] Operating
[X] Permit renewal	[ ] Construction/operating

COMPLIANCE SUMMARY:

[ ] Source is out of compliance [ ] Compliance schedule included

[X] Compliance certification signed

APPLICABLE REQUIREMENTS LIST:

[ ] NSR	[X] NSPS	[X] SIP
[X] PSD	[X] NESHAPS	[ ] Other
[ ] Netted out of PSD/NSR	[ ]	Not major modification per 401 KAR 51:001, 1(116)(b)

MISCELLANEOUS:

[ ] Acid rain source
[ ] Source subject to 112(r)
[ ] Source applied for federally enforceable emissions cap
[ ] Source provided terms for alternative operating scenarios
[X] Source subject to a MACT standard
[ ] Source requested case-by-case 112(g) or (j) determination
[ ] Application proposes new control technology
[X] Certified by responsible official
[ ] Diagrams or drawings included
[ ] Confidential business information (CBI) submitted in application
[ ] Pollution Prevention Measures
[ ] Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM_{10}	197	2427
SO_2	30.75	318
NOx	200	487
CO	687	1726
VOC	81	140
Single hap	0.06	0.54
Source wide HAPs	0.06	0.54

SOURCE DESCRIPTION:

The Gallatin Steel facility in Ghent**,** Kentucky recycles scrap steel to make new hot-rolled steel coils using a continuous Compact Strip Production or CSP process. Gallatin is ISO/TS 16949 certified. The manufacturing facility consists of a twin-shell DC electric arc furnace, a ladle metallurgy facility, a thin-slab continuous caster and a six-stand hot finishing mill. Gallatin Steel, located on the Ohio River in Ghent, KY, produces hot rolled sheet steel coil, hot rolled P&O coil and hot rolled slit coil in low carbon (C1010), medium carbon (C1015-C1035), high carbon (C1050-C1055) and HSLA chemistries (up to 80 ksi min yield) from gauges of 0.055" to .625" thick and 42" to 64" wide.

EMISSION AND OPERATING CAPS DESCRIPTION:

Steel production rates shall not exceed 275 tons per hour (combined production rate, averaged over 168 hours) from the twin-shell EAF as measured at the outlet of the caster. Simultaneous arc operation in both shells is prohibited (limit on PTE).

The permittee shall use high-grade, low residual, pre-processed and inspected scrap (BACT).

The permittee shall not add into the EAF any charged carbon or any other carbon substitutes with a sulfur content greater than 0.65 percent by weight as received (BACT).

The permittee shall properly maintain and operate the sidewall burners (located within the EAF shell) in accordance with manufacturer's guidelines. The sidewall burners may be removed and/or replaced if the permittee demonstrates to the Division's satisfaction that compliance with the BACT limitations listed herein can be achieved (BACT).

The total baghouse particulate emission rates shall not exceed 32.1 lbs/hr (BACT).

The particulate grain loading as measured at the baghouse exits by Reference Method 5D, 40 CFR 60, Appendix A, shall not exceed 0.0018 grain/dscf (BACT).

Total carbon monoxide emissions shall not exceed 550 lbs CO/hr (BACT).

Process rate based carbon monoxide emissions shall not exceed 2 lbs CO/ton of liquid steel (BACT).

Total nitrogen oxide emissions shall not exceed 140.25 lbs NO_2/hr (BACT).

Process rate based nitrogen oxide emissions shall not exceed 0.51 lbs NO_2/ton of liquid steel (BACT).

For products with sulfur chemistries ≥ 0.012 wt % sulfur, 55 lbs SO_2/hr; for all other products 134.8 lbs SO_2/hr (BACT).

For products with sulfur chemistries ≥ 0.012 wt % sulfur, 0.2 lbs SO_2/ton of liquid steel, for all other products 0.49 SO_2/ton of liquid steel (BACT).

Total lead emissions shall not exceed 0.22 lb Pb/hr (BACT).

Lead emissions shall not exceed 0.00081 lb Pb/ton of liquid steel (BACT).

Total VOC emissions shall not exceed 35.8 lbs VOC/hr (BACT).

VOC emissions shall not exceed 0.13 lb VOC/ton of liquid steel (BACT).

OPERATIONAL FLEXIBILITY:
None